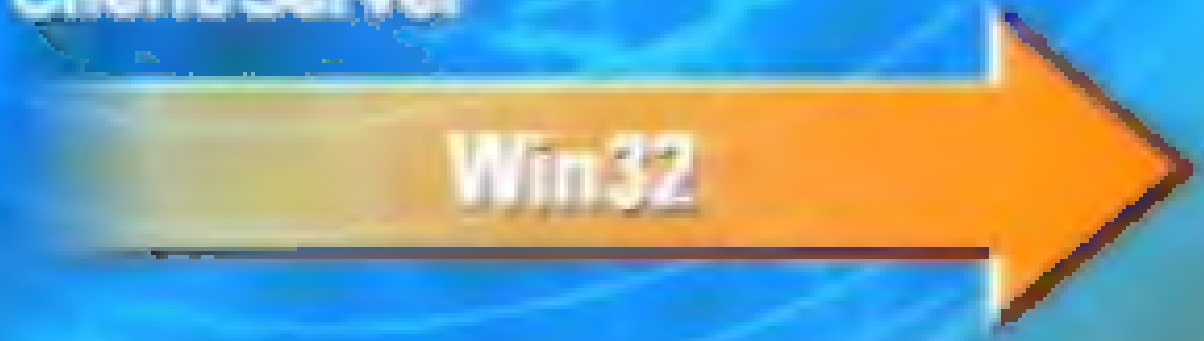
Talk Agenda

- Introduce .NET Framework Platform
  - Background on CLR, Framework Libraries
- Introduce ASP+
  - Comparison with ASP
- Walkthrough lots of ASP+ Code Examples
  - Build Pages and Services

A New Generation Of Software From Microsoft

1992
Client/Server



A New Generation Of Software From Microsoft

1996
Internet
1st Gen

IE/IIS

1992
Client/Server

Win32

Third Generation Internet

1st Generation	2nd Generation	3rd Generation
1994-96	1996-2000	2000+
Static pages	Dynamic pages	Rich browsing
E-mail, basic information	Start of personalization, e-commerce	Web Services
IE, IIS	Windows DNA	.NET

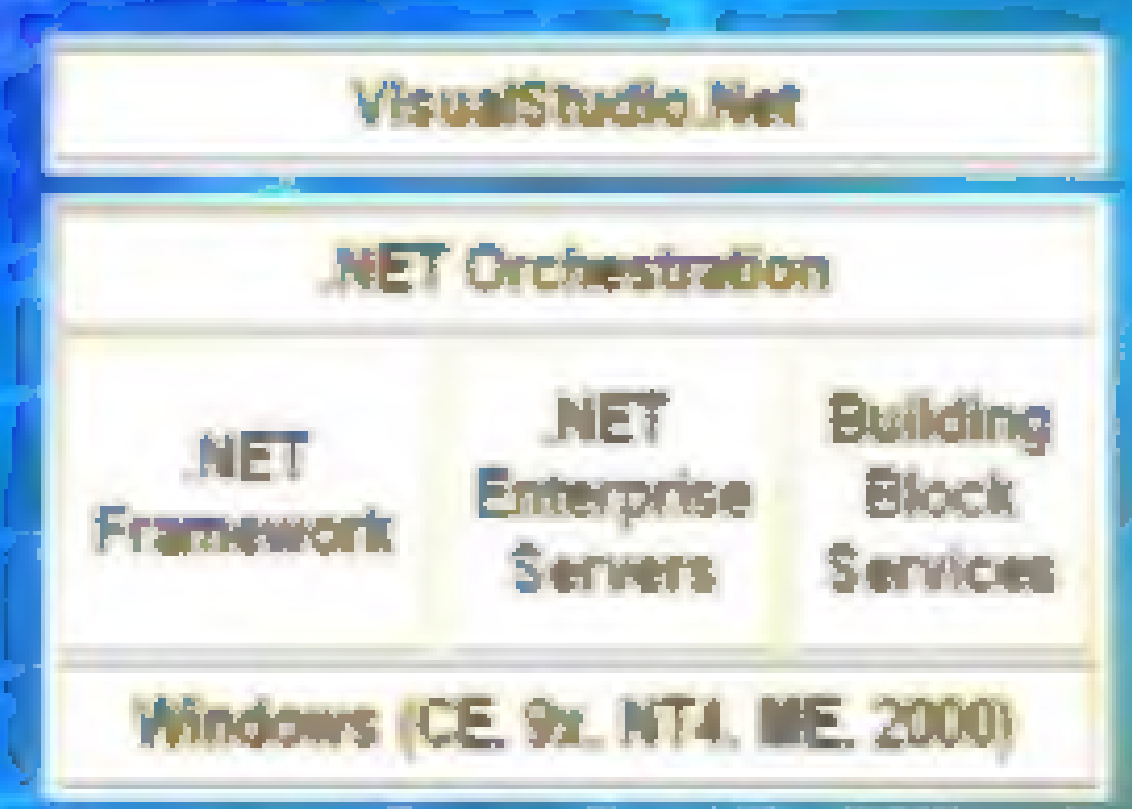
.NET Web Applications

.NET Web Applications

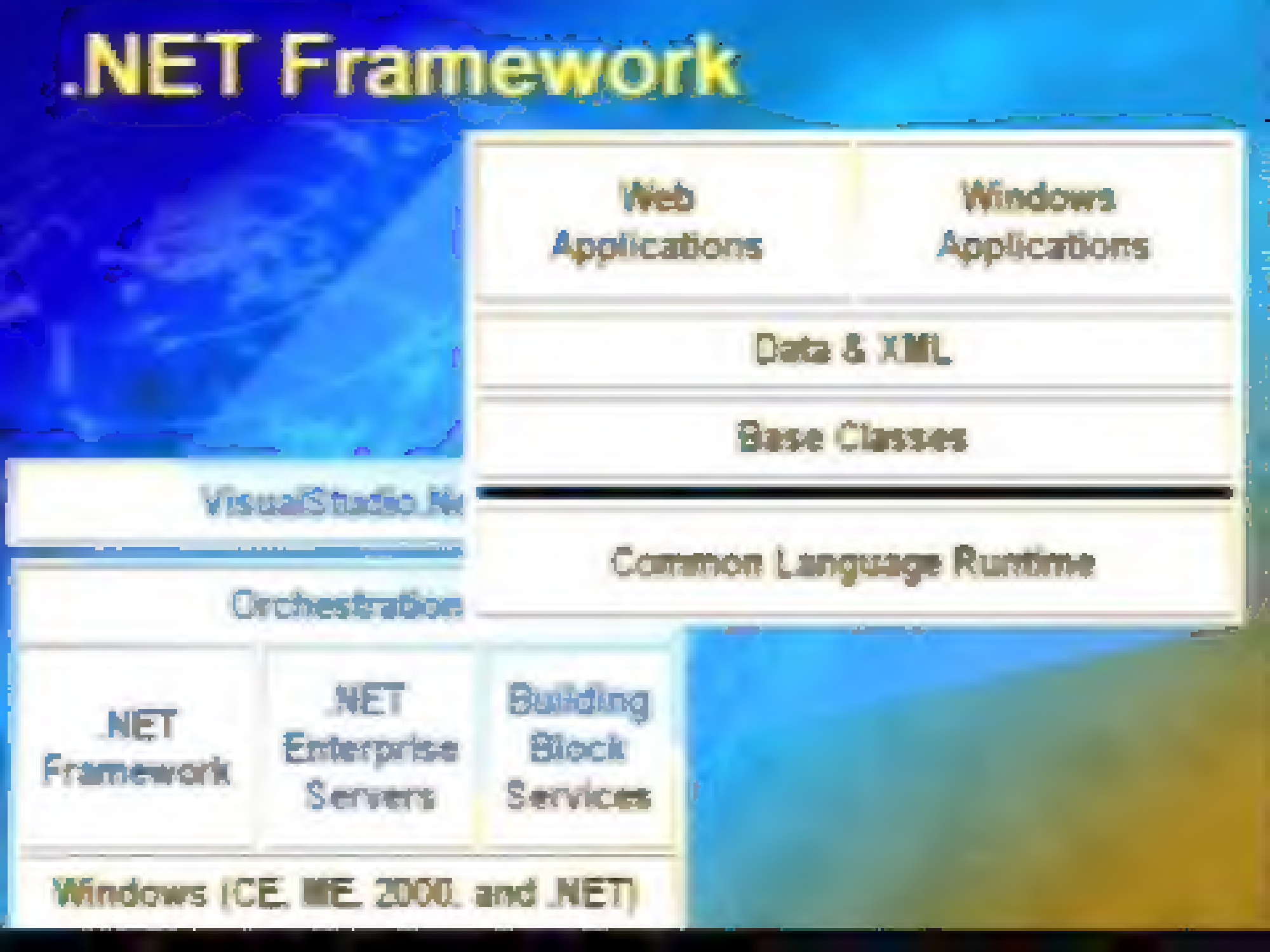
.NET Web Applications

.NET Web Applications

Introducing .NET Platform

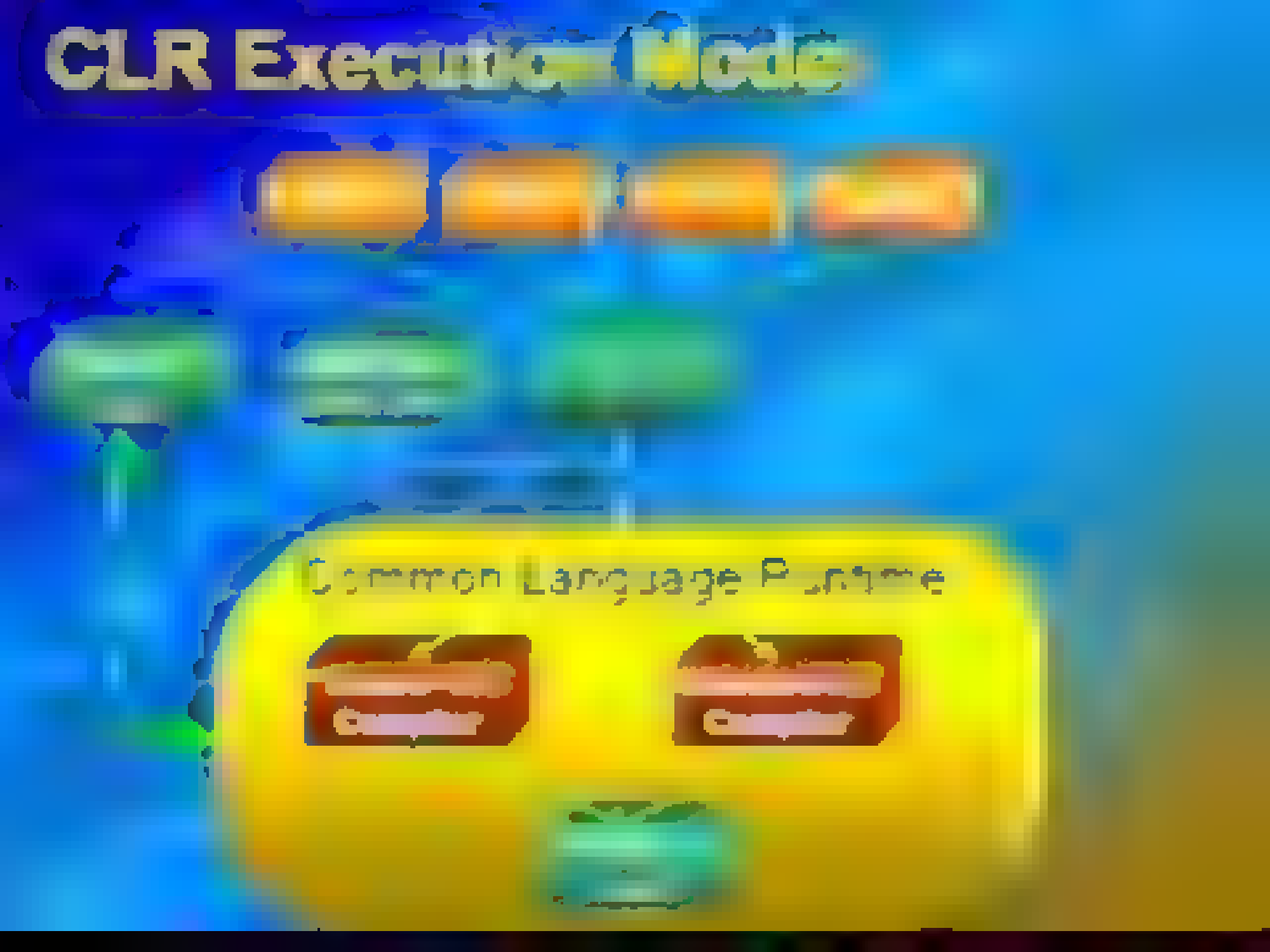


.NET Framework



Common Language R[illegible]

CLR Execution Model



Common Language Runtime

- Eliminates the pre-

.NET Framework Libr[illegible]

- [illegible]
- [illegible]

.NET Framework الأساسية

- System
- System.Collections
- System.Diagnostics
- System.Globalization
- System.IO
- System.Net
- System.Reflection
- System.Resources
- System.Security
- System.Text
- System.Threading
- System.Web
- System.Web.Services
- System.Windows.Forms
- System.Xml

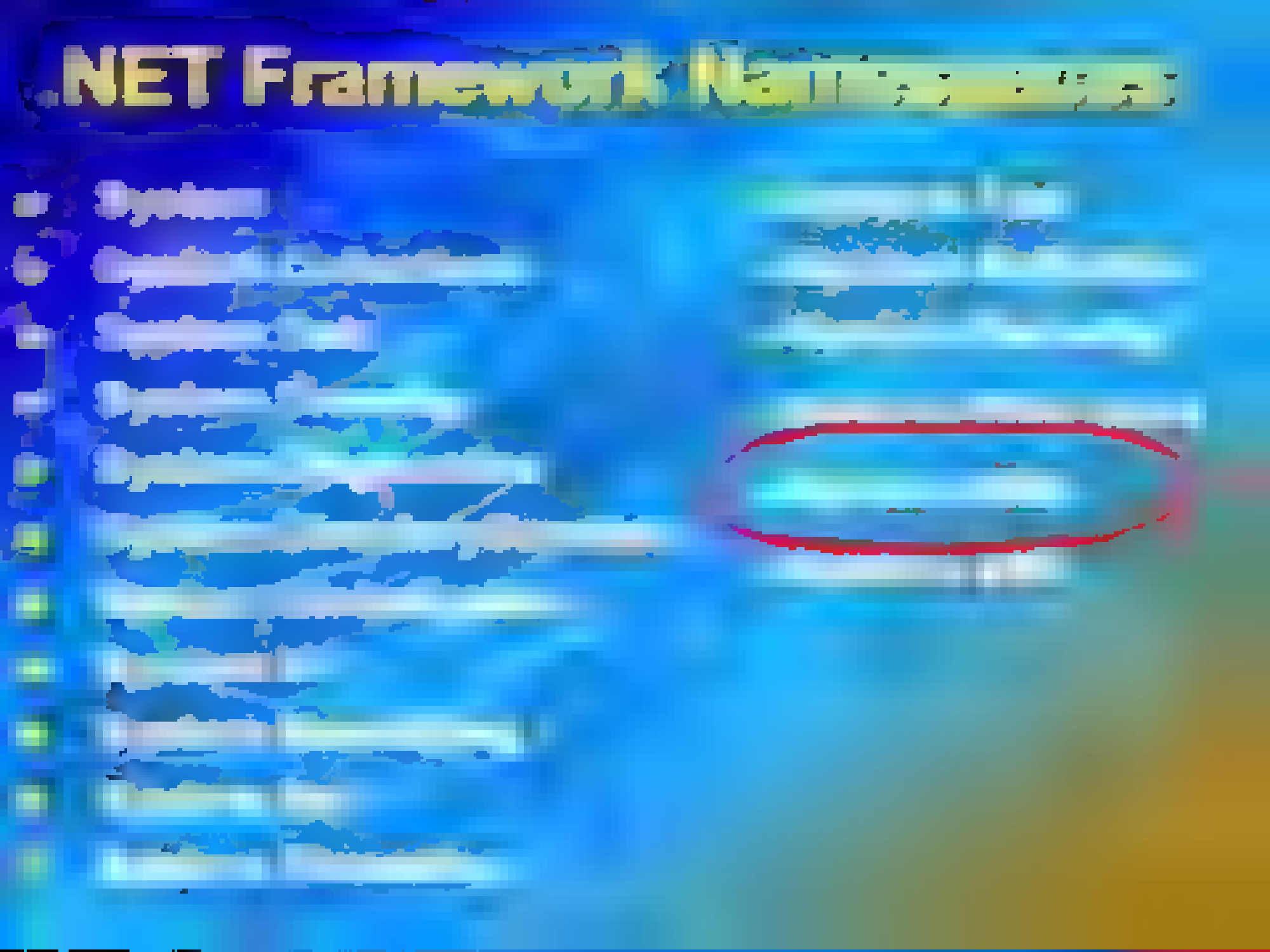
.NET Framework Class Library

- System
- System.Collections
- System.Collections.Generic
- System.Collections.Specialized
- System.Configuration
- System.Data
- System.Data.Common
- System.Data.Odbc
- System.Data.OleDb
- System.Data.SqlClient
- System.Data.SqlTypes
- System.Diagnostics
- System.Drawing
- System.Drawing.Drawing2D
- System.Drawing.Imaging
- System.Drawing.Printing
- System.Drawing.Text
- System.Globalization
- System.IO
- System.Net
- System.Net.Mail
- System.Net.Sockets
- System.Reflection
- System.Security
- System.Security.Cryptography
- System.Security.Permissions
- System.Security.Policy
- System.Security.Principal
- System.Text
- System.Text.Regex
- System.Threading
- System.Web
- System.Web.Caching
- System.Web.Configuration
- System.Web.Mail
- System.Web.Security
- System.Web.Services
- System.Web.Services.Description
- System.Web.Services.Protocols
- System.Web.UI
- System.Web.UI.HtmlControls
- System.Web.UI.WebControls
- System.Web.UI.WebControls.Adrotator
- System.Web.UI.WebControls.Calendar
- System.Web.UI.WebControls.Checkbox
- System.Web.UI.WebControls.Dropdownlist
- System.Web.UI.WebControls.Hyperlink
- System.Web.UI.WebControls.Image
- System.Web.UI.WebControls.Listbox
- System.Web.UI.WebControls.Listitem
- System.Web.UI.WebControls.Literal
- System.Web.UI.WebControls.Multiview
- System.Web.UI.WebControls.Panel
- System.Web.UI.WebControls.Radiobutton
- System.Web.UI.WebControls.Radiobuttonlist
- System.Web.UI.WebControls.Textbox
- System.Web.UI.WebControls.Validation
- System.Web.UI.WebControls.Webpart
- System.Web.UI.WebControls.Webpartzone
- System.Web.UI.WebControls.Wizard
- System.Web.UI.WebControls.Xml
- System.Web.UI.Webparts
- System.Web.UI.Xml
- System.Web.Xml
- System.Xml
- System.Xml.Schema
- System.Xml.Serialization
- System.Xml.Xpath
- System.Xml.Xsl

.NET Framework Namespaces

- System

.NET Framework



ASP Today (the Pros)

- The [illegible]
  - [illegible]
- [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
  - [illegible]

ASP Today (the Core)

- Why [illegible]
  - [illegible]
  - [illegible]
- [illegible]
  - [illegible]
  - [illegible]
  -

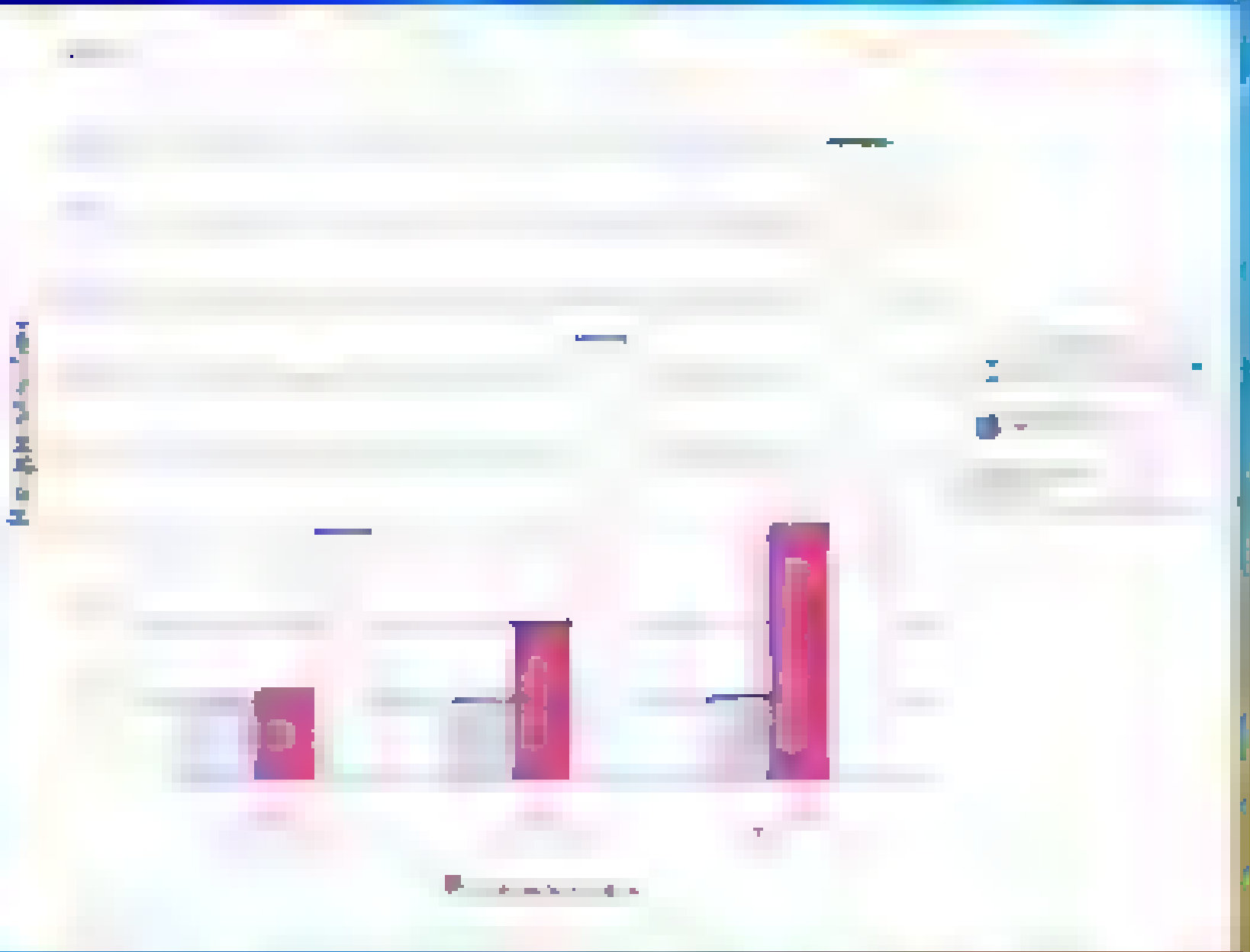
ASP Today (the Core)

- Work space
  - [illegible]
- [illegible]
  - [illegible]
  - [illegible]
- [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
  - [illegible]

Introducing ASP+

- ASP+ [illegible]
  [illegible]
  [illegible]
- [illegible]

MSN Home Page Portal



ASP+ Web Pages (1 of 7)

- Great News! [illegible] dynamic web pages
- Simply [illegible]
  - [illegible]
- Example [illegible]
- [illegible]
  - [illegible]

ASP+ Web Pages (2 of 2)

- Declarative syntax
  - Simple
  - Powerful
  - Flexible
- Visual Studio .NET
  - Drag-and-drop
- [illegible]

Welcome to ASP+

Welcome to ASP+

Welcome to ASP+

Welcome to ASP+

Welcome to ASP+

Welcome to ASP+

Welcome to ASP+ (now in C#!)

Welcome to ASP+ (now in C#!)

Welcome to ASP+ (now in C#!)

ASP0 Error

Compilation Error

[illegible]

Compiler Error Message: [illegible]

Insert a Error

[illegible]

Source File: [illegible]

Show Complete Compiler Output

[illegible]

ASP.Net Error

[illegible]

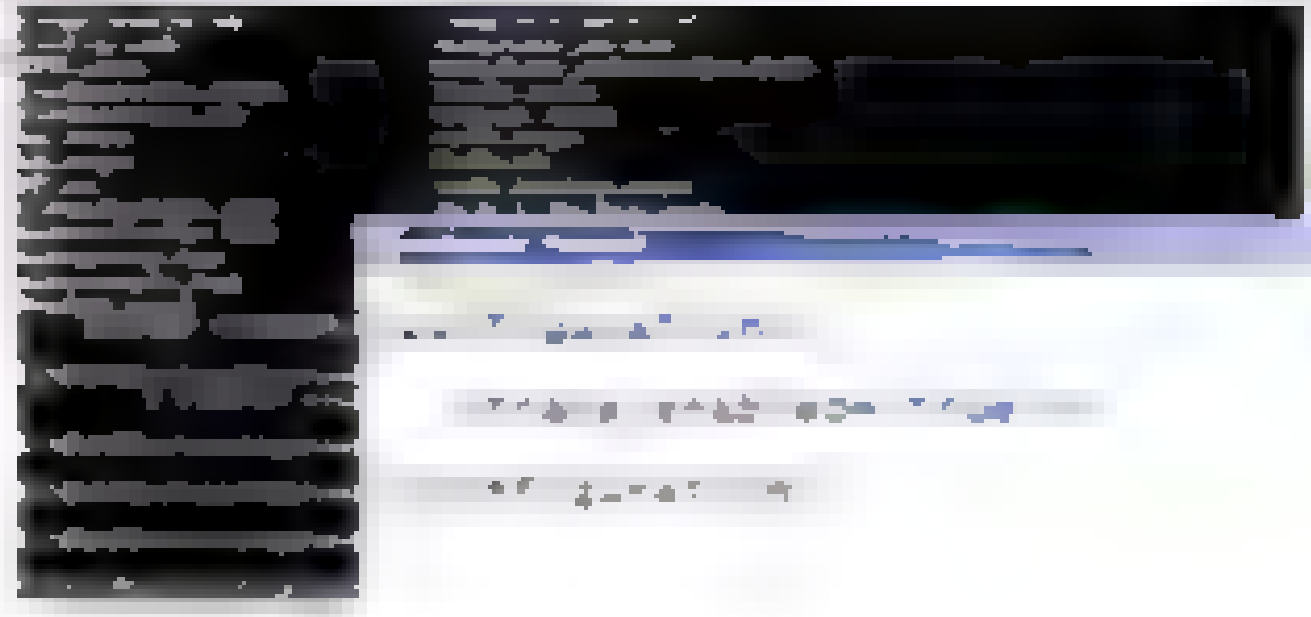
ASP+ Error

Compiler Error Error

[illegible]

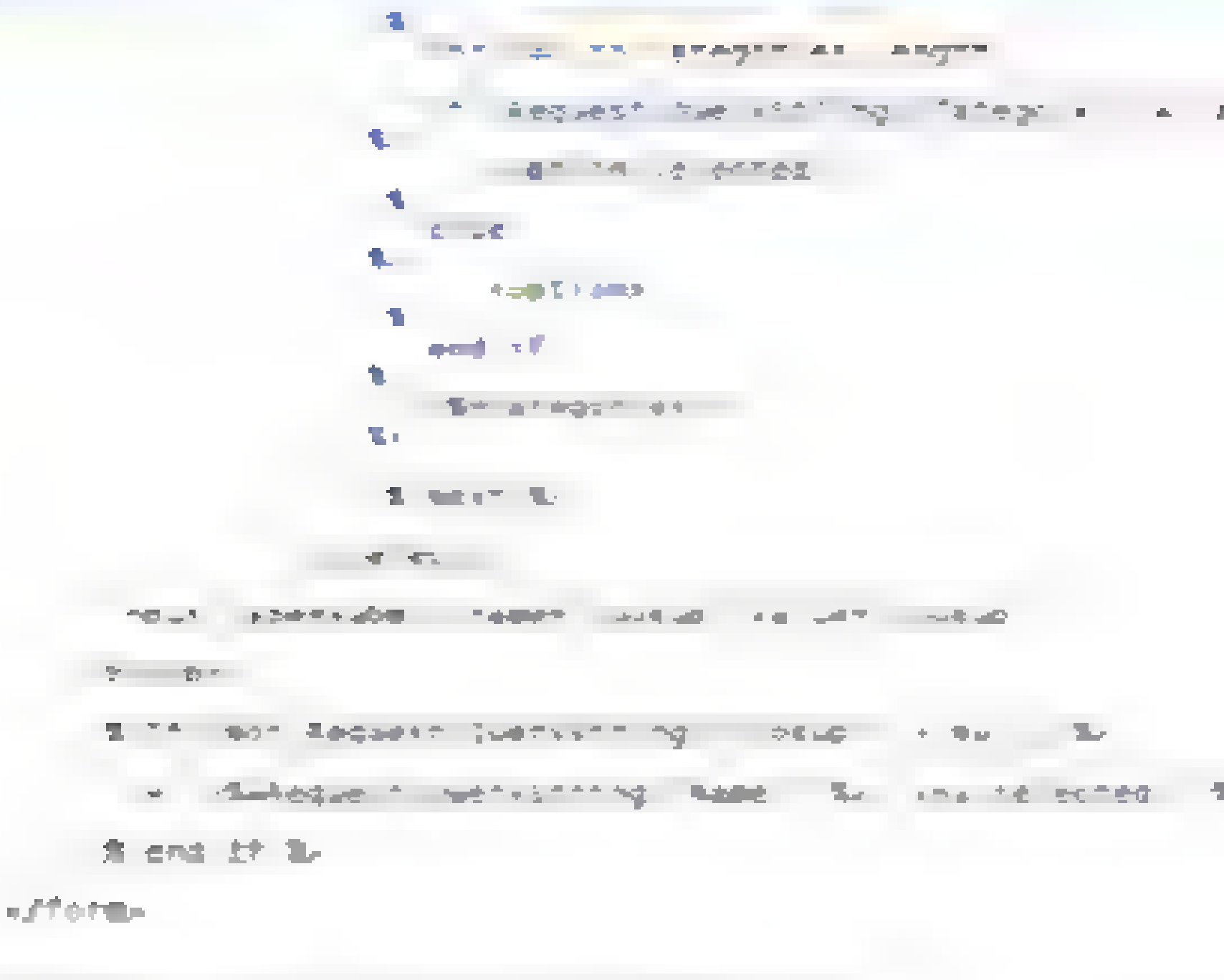
[illegible]

Welcome to ASP+ (now in C#)



[illegible]

```
ergl>
  head>
        [illegible]
  head

  body>

    [illegible]

      [illegible]

      %
        [illegible] is integer
        [illegible]

          [illegible]
          [illegible]
          [illegible]
      %>

      [illegible]

                  %
                    [illegible]

                      [illegible]
                  %>
                    [illegible]
                  %
                    else
                  %>
```



[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

```
etm's
  rest
        $   $ = >', ashed' ' $'= ma $'' ,ng' ,,
 = Read>

 ''''''  ingage +$  ''''''''''

     .ab 'ige  ''' ''''' ,, '' ''' ' ,, ! ''''''
         message ''''          $ happ ''' $   ,,, ,, ,,,,,,,,,,,   $ ''''''
    End Sub

  =  ,>

<body>

     ''''' ''''''', ''''' ''''',,,,,,,

        '''  ''''''   ''' ''''''''' ,,  ''''''  ''''' ''''''

        ''''''''''  ''''' ''''''''''''' ''' ,,,  ,, ''''''''''' ''''''''''''''''''''
                  ''''''''''''''''''''
```

```
[illegible]
  [illegible]
    [illegible]
  [illegible]

[illegible]

    [illegible]
        [illegible]
    [illegible]

  [illegible]

[illegible]

    [illegible]

        [illegible]

        [illegible]
                [illegible]
                [illegible]
                [illegible]
            [illegible]

        [illegible]

        [illegible]

        [illegible]

    [illegible]
```

```
[illegible]
  [illegible]
  [illegible]
</Head>

[illegible]

    [illegible]
        MsgBox "[illegible]" & vbCrLf & "[illegible]" & [illegible]
    End Sub

</Script>

</Body>

    [illegible]

    [illegible]

        [illegible]

        [illegible]
                [illegible]
                [illegible]
                [illegible]
                [illegible]
            [illegible]

        [illegible]

        [illegible]

        [illegible]
```

[illegible]

[illegible]

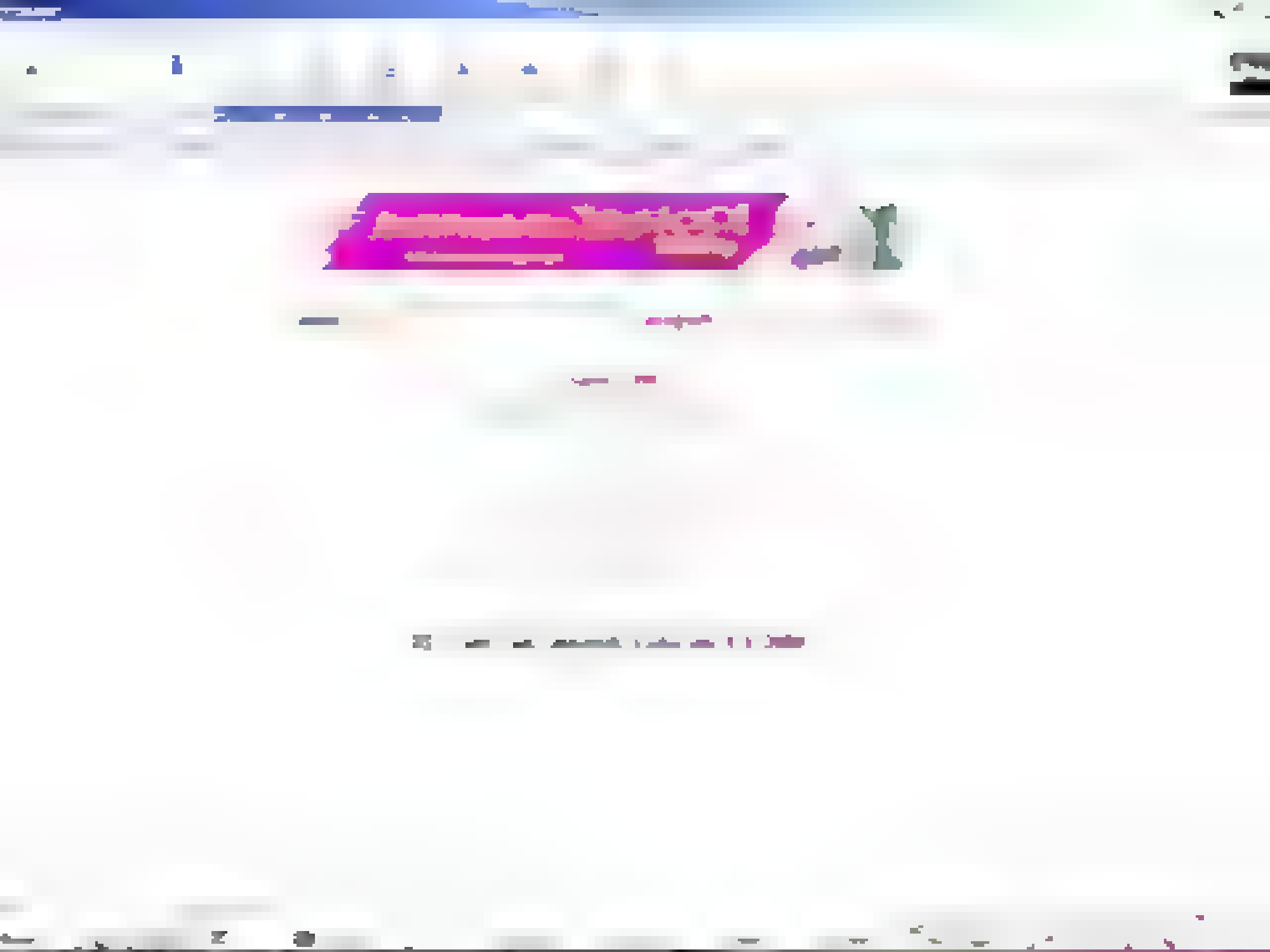
[illegible]

[illegible]

[illegible]

```
[illegible]
  [illegible]
  [illegible]
</head>

[illegible]

  [illegible]

    [illegible]

    [illegible]

    [illegible]

    [illegible]

    [illegible]

  [illegible]

[illegible]

[illegible]

  [illegible]

  [illegible]

    [illegible]
```

[illegible]



[redacted]

[redacted]

[illegible]

[illegible]

[redacted]

[illegible]

```
                    <asp:Label ID="lblCurrency" runtime="server"
                        <td Alignment="right" CssClass="text-size-right">
                            <%#DataBinder.Eval(Container.DataItem,"Price",
                        </td>
                    </tr>
                </ItemTemplate>

                <AlternatingItemTemplate>
                    <tr><td>{quote_id_height_1 bgcolor="#DDDDDD"></td>
                    </tr>
                </AlternatingItemTemplate>

                <FooterTemplate>
                    <tr><td>{quote_id_height_1 bgcolor="#DDDDDD"></td>
                    </tr>
                </FooterTemplate>

            </asp:DataGrid>
```

```
                    <
                    <asp:Label id="lblCurrency" runtime="server"
                        <td Alignment="right" CssClass="text-size-right">
                            <%#DataBinder.Eval(Container.DataItem,"Price",
                        </td>
                    </tr>
                </ItemTemplate>

                <AlternatingItemTemplate>
                    <tr><td>{quote_id_height_1 bgcolor="#DDDDDD"></td>
                    </tr>
                </AlternatingItemTemplate>

                <FooterTemplate>
                    <tr><td>{quote_id_height_1 bgcolor="#DDDDDD"></td>
                    </tr>
                </FooterTemplate>

            </asp:DataGrid>
```

```
using System.Text.Text.Configuration

# Name  ID  Text  Image Name  Database Name

Image/.  Size of the image in the image configuration
         big  [illegible]
         Add  [illegible]
         big  [illegible]
         [illegible]

Add Editor Text Image [illegible] Image Size [illegible]

<br>
Add [illegible] Text [illegible] Image Name [illegible]


Add Text [illegible] Image [illegible] [illegible]

  Text Size Name Configuration

    <table>
      <tr>  [illegible]
      td  [illegible]
      td  [illegible]
    </table>

  Text Size

<  Add Data[illegible]>

</form>
```

```
[illegible]

  [illegible]

  [illegible]

  [
```

[illegible]

[illegible]

[illegible]

[redacted]

[illegible]

[illegible]

[illegible]

```
<xsl:template match="/">
  <xsl:apply-templates select="/">
    <xsl:sort select="/">
    <xsl:sort select="/">
    <xsl:sort
```

```
[illegible]

[illegible]

[illegible]
```

Product Category Milk

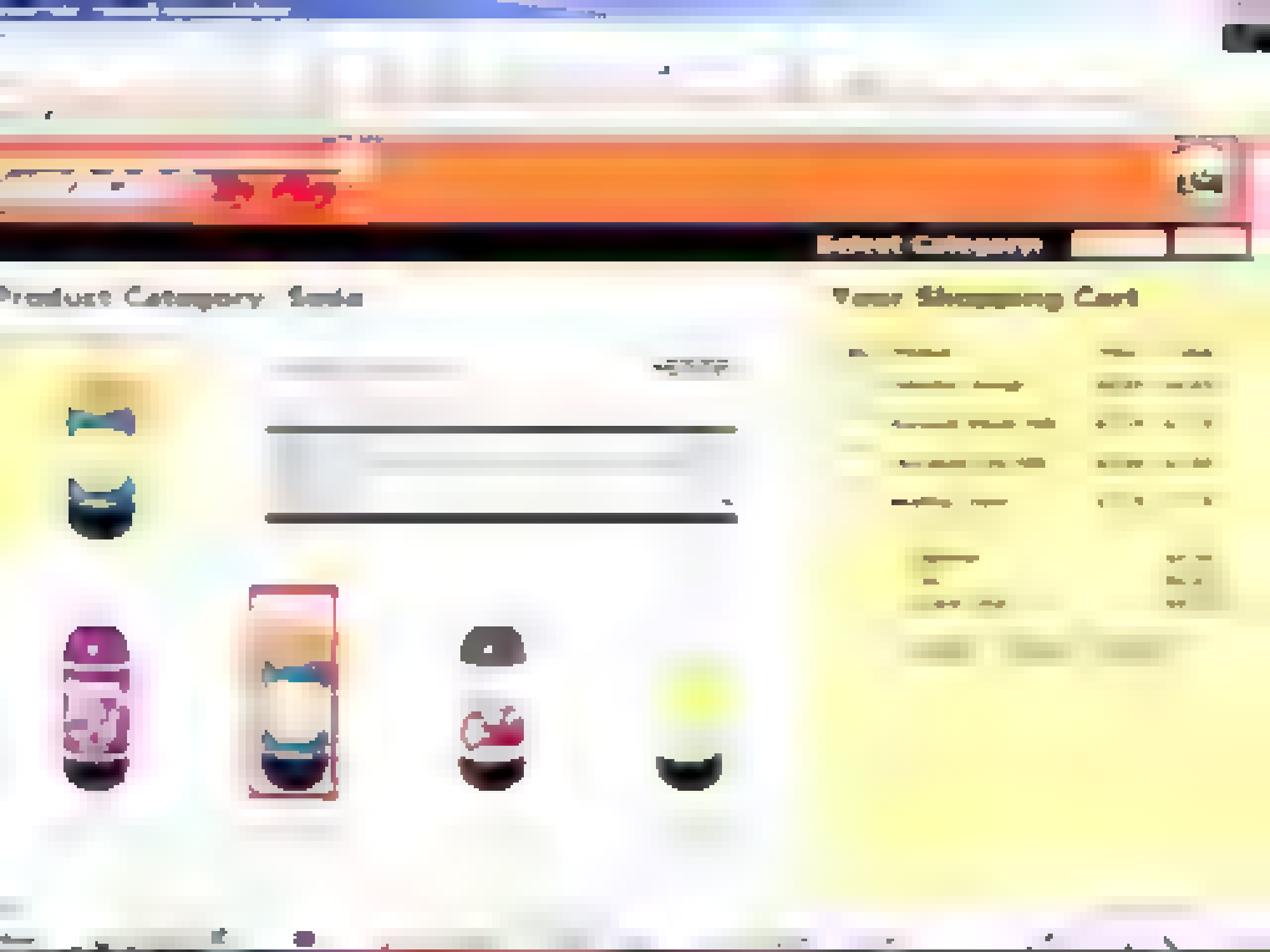
Your Shopping Cart

Product Category Soda

Your Shopping Cart

```
</style>

[illegible]

[illegible]

[illegible]
```

```
[illegible]

[illegible]

[illegible]

[illegible]

public [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]
```


Select Category
Product Category Sale
Your Shopping Cart

Product Category Soda

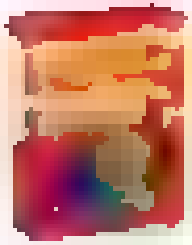
Your Shopping Cart

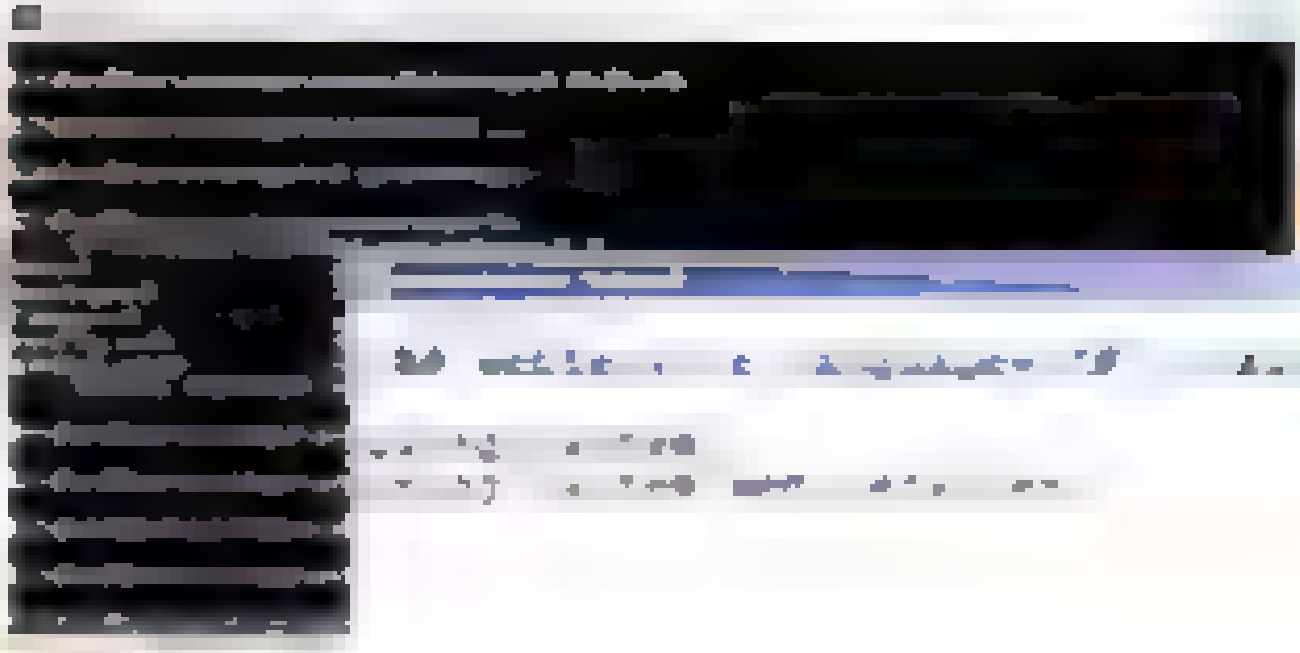
ASP+ Web Services

- Quick Hello World [illegible]
  [illegible]
- [illegible]
  - [illegible]
  - [illegible]
  -

ASP+ Web Services

- Great Hotel is [illegible]
- [illegible]





Research WebService

Research WebService

```
[illegible]
[illegible]
[illegible]

[illegible]
[illegible]
    [illegible]

[illegible]
[illegible]
    [illegible]

[illegible]
[illegible]

    [illegible]

    [illegible]
    [illegible]

    [illegible]
    [illegible]

    [illegible]
```

[illegible]

```
- DocumentElement
  - [illegible]
    - [illegible]
      Property
        - [illegible]
          - ProductID [illegible] int
          - CategoryID [illegible] 0
      int
          - ProductName [illegible] string
          - ProductDescription [illegible] 0
      string
          - UnitPrice
            System.Currency
      string
          - ImagePath [illegible] 0
    - string
          - ServingSize [illegible] 0
    - string
          - Servings [illegible] 0
```

```
- DataSet1Command
  - [illegible]
    Products
      - [illegible]
        - ProductID - int
        - CategoryID - [illegible] - int
        - ProductName - string
        - ProductDescription - [illegible] - string
        - UnitPrice - System.Decimal
        - string
        - ImagePath - [illegible] - string
        - [illegible] - [illegible] - string
        - Services - [illegible] - int
          Quantity - [illegible] - int
          MinOrdered - [illegible] - int
          MaxOrdered - [illegible] - int
        - [illegible] - [illegible] - string
```

```
using System.[illegible]

[illegible]

  public int[illegible] OrderID
  [illegible]

[illegible]

  [illegible]
  [illegible]
    return [illegible];

  [illegible]
  [illegible]
    [illegible]

  [illegible]
  [illegible]

    [illegible]
    [illegible]

    [illegible]
    [illegible]

    return [illegible]
```

```
[illegible]

ublic class Order {

  ublic int      OrderID
  ub[illegible] string [illegible]


[illegible] [illegible] Accept

  [illegible]
  [illegible] [illegible] [illegible]

    [illegible] [illegible] + [illegible]

    [illegible] [illegible]
    [illegible] [illegible] + [illegible]

    [illegible] [illegible]


  [illegible]
  [illegible] [illegible] [illegible] [illegible]

    [illegible]
    [illegible] + [illegible]

    [illegible]
    [illegible]

    [illegible] [illegible]


[illegible]
```

Research WebService

$5757

ASPS Wk 1 [illegible]

ASP+ Web Apps [illegible]

- Programming [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
- [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
  - [illegible]

ASP+ Deployment

- Goal: Enable [illegible]
  [illegible]
- [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
  - [illegible]

Improved Code Debugging

- Simple debugging
  - [illegible]
  - [illegible]
- End [illegible]

Dynamic Code Update

- Component [illegible]
  - [illegible]
- Just [illegible]
- [illegible]

Improved Configuration

- Cost Reduction
  - [illegible]
  - [illegible]
  - [illegible]
- Configuration
  - [illegible]
  - [illegible]
- [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
- [illegible]
  - [illegible]
  - [illegible]

Sample Configuration

localhost - cookies

.net

Cookieless Session Demo > Page 1 >

.net

. ...ssionless Session Demo : Page 2 :

Web Farm Scalability

- Session State [illegible]
- Application [illegible]
- [illegible]

.net

External Session State Demo : Page 2

[illegible]

[illegible] 08/16/2000 17:31:20

[illegible] 5000

.net

External Session State Demo : Page 2 :

1023

.net

External Session State Demo (Page 2)

Fred

08 10 2000 17:32:28

1028

.net

External Session State Demo (Page 2)

Fred

1216

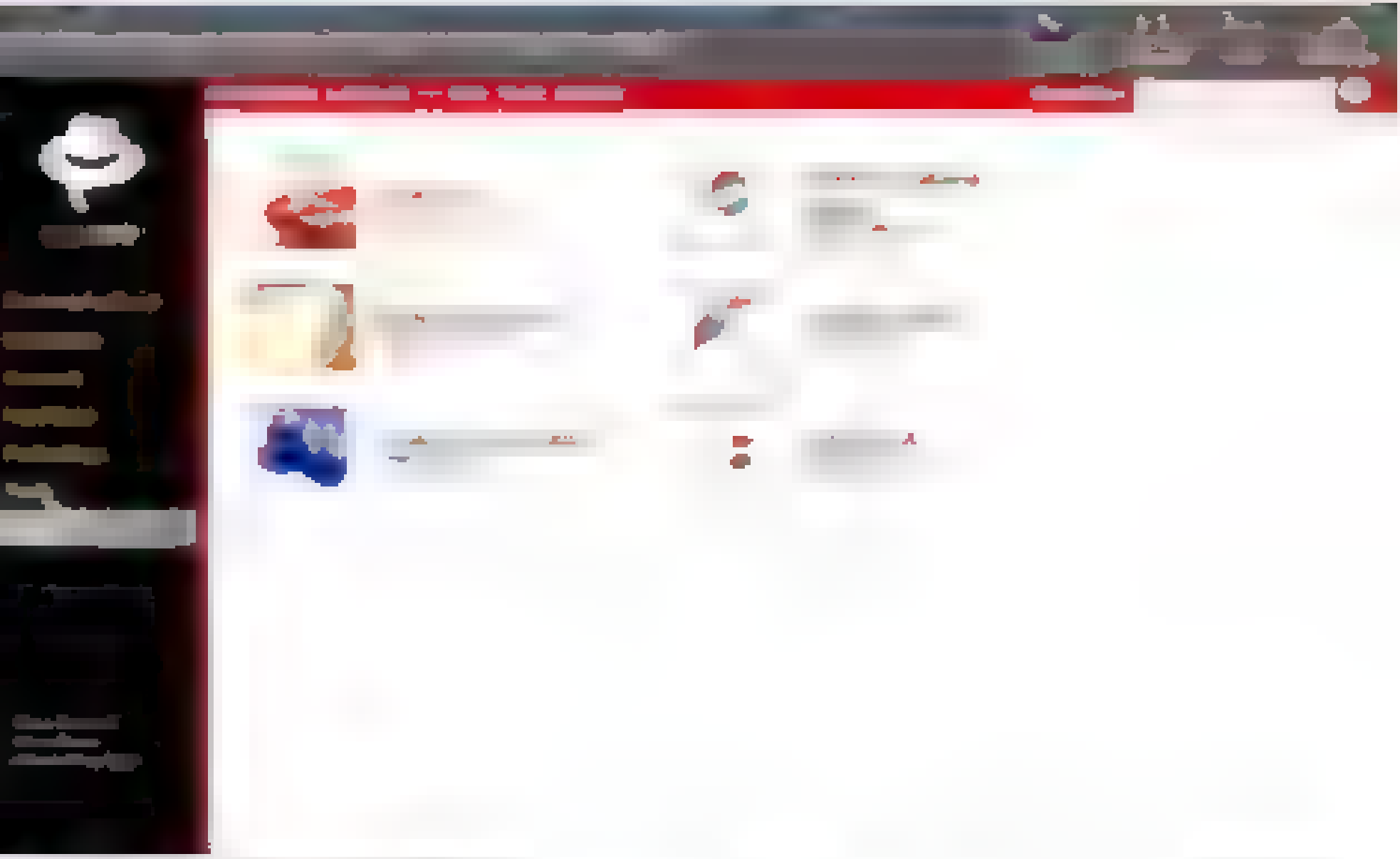
Caching Support

- Goal: Provide [illegible]
  [illegible]
- Support [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
  - [illegible]

This time is now: [illegible] 16 2008 1:[illegible] 34:58

This time is [illegible]

```
<[illegible]>
    <[illegible]>
        [illegible]
    <[illegible]>
</[illegible]>
```



Caching Support

- Goal: Provide [illegible]
  [illegible]
- Output Cache
  - [illegible]
  - [illegible]
  - [illegible]
- [illegible]
  - [illegible]
  - [illegible]
  - [illegible]

Authentication

- Basic, Digest and [illegible]

Authorization

Authorization

Code Execution

- [illegible]
- [illegible]

Improved Reliability

- ASP.NET [illegible]
  - [illegible]
  - [illegible]
- ASP.NET [illegible]

Improved Reliability

- ASP+ has [illegible]
  - [illegible]
- [illegible]

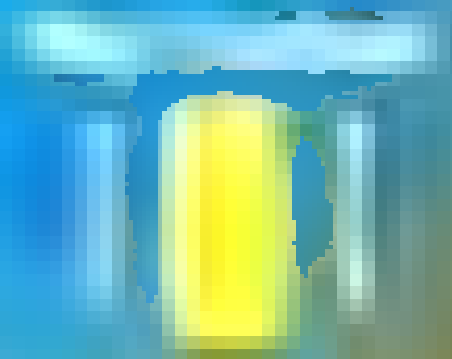
Factorial

Http Runtime

- Goals Followed
  - [illegible]
- Problem [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
- [illegible]
  - [illegible]

ASP+ HTTP Routing

ASP+ HTTP Runtime



Request Interception [illegible]

- [illegible]

Request Interception: Firewall

- Performance [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
  - [illegible]

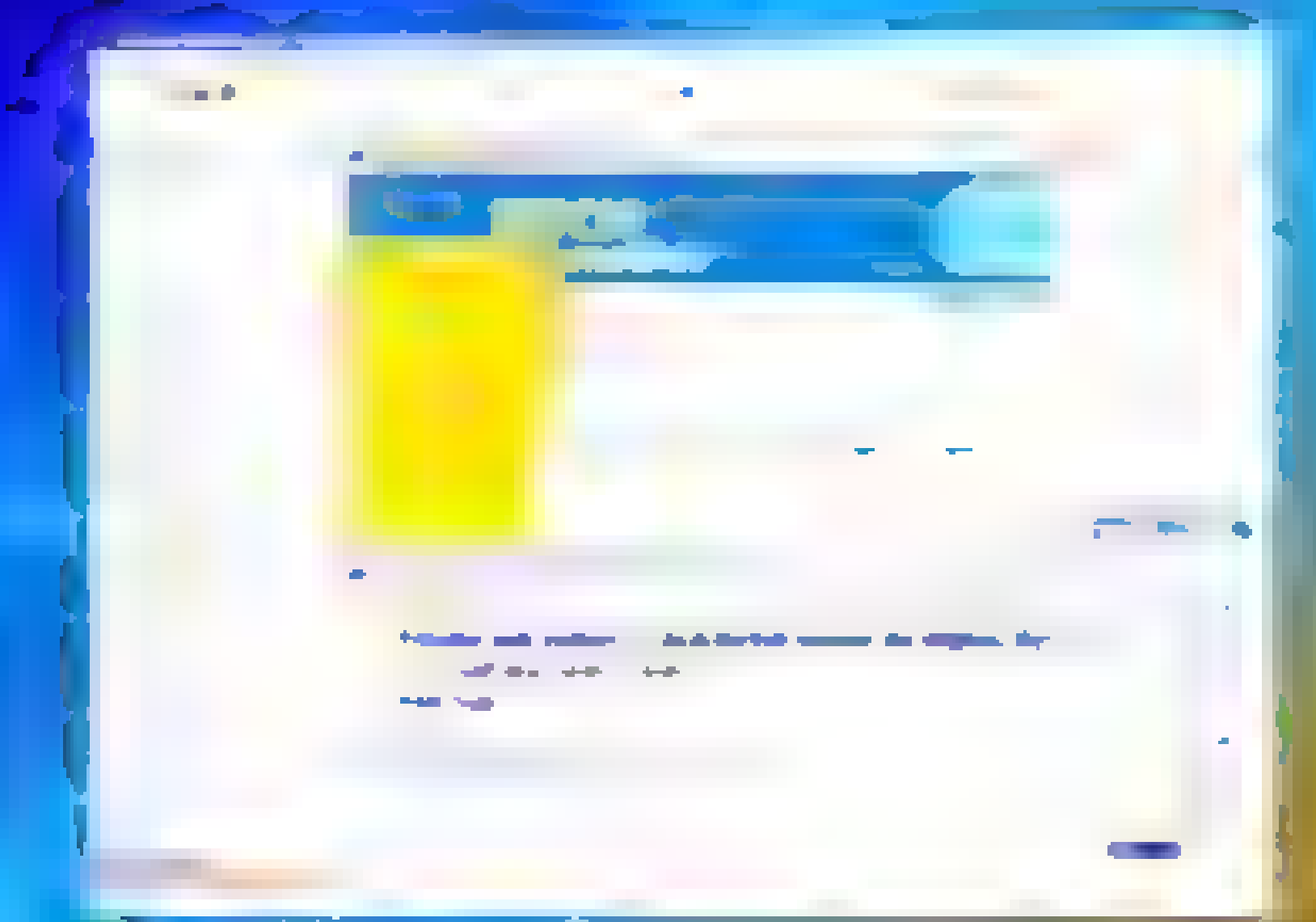
Request Interception [illegible]

- [illegible]

Request Interception: Firewall

- [illegible]

Visual Studio

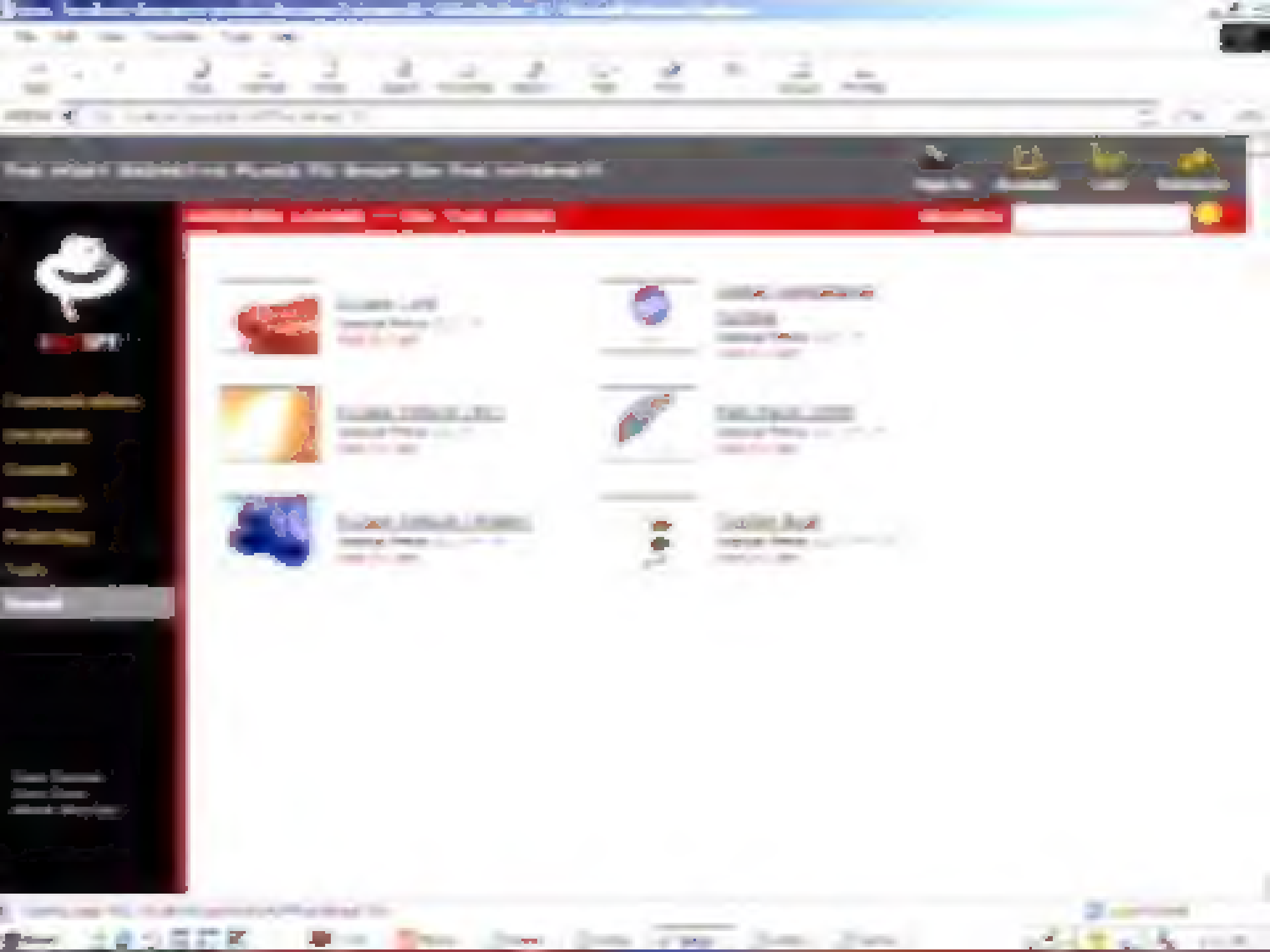


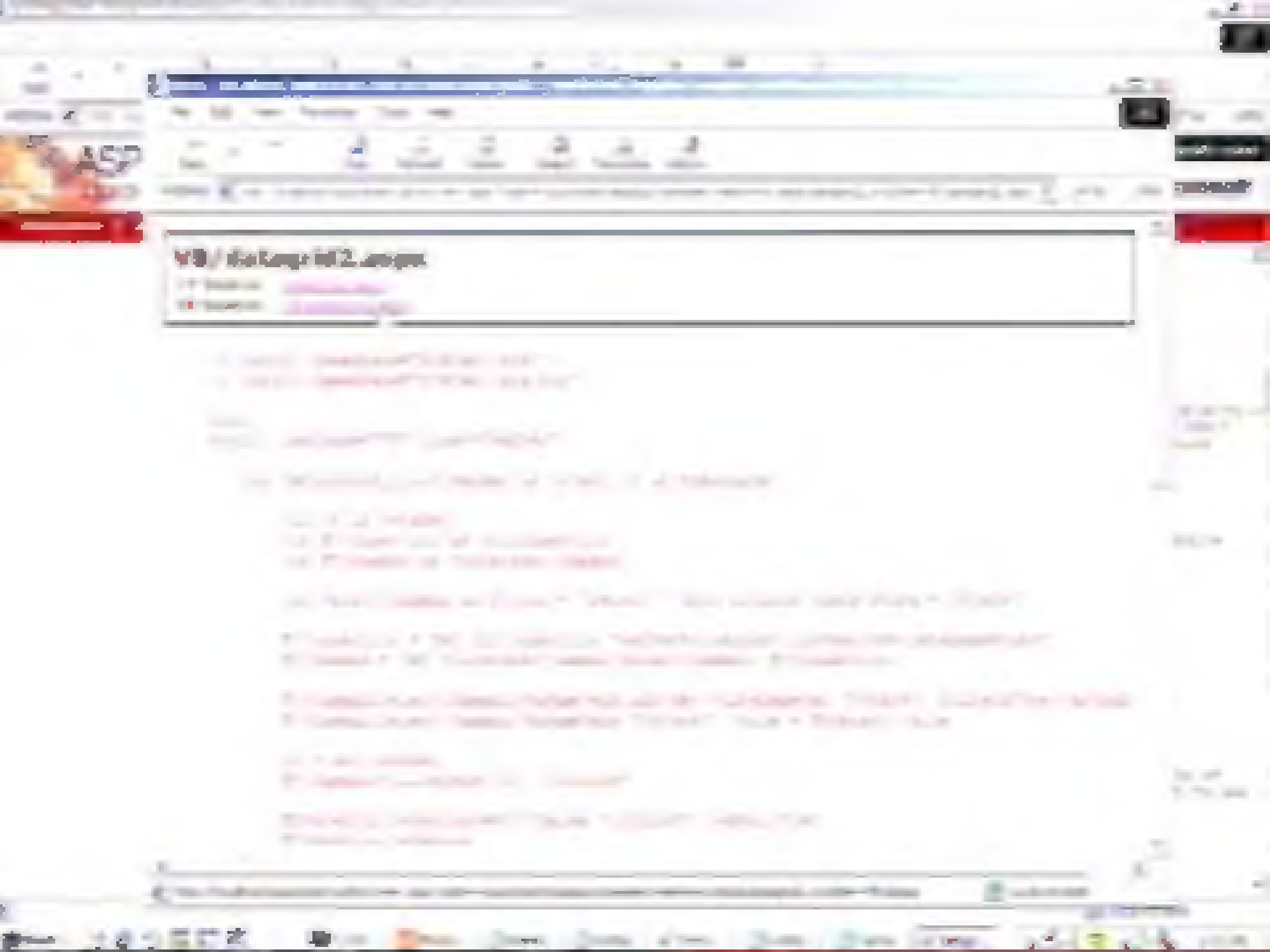
Summary

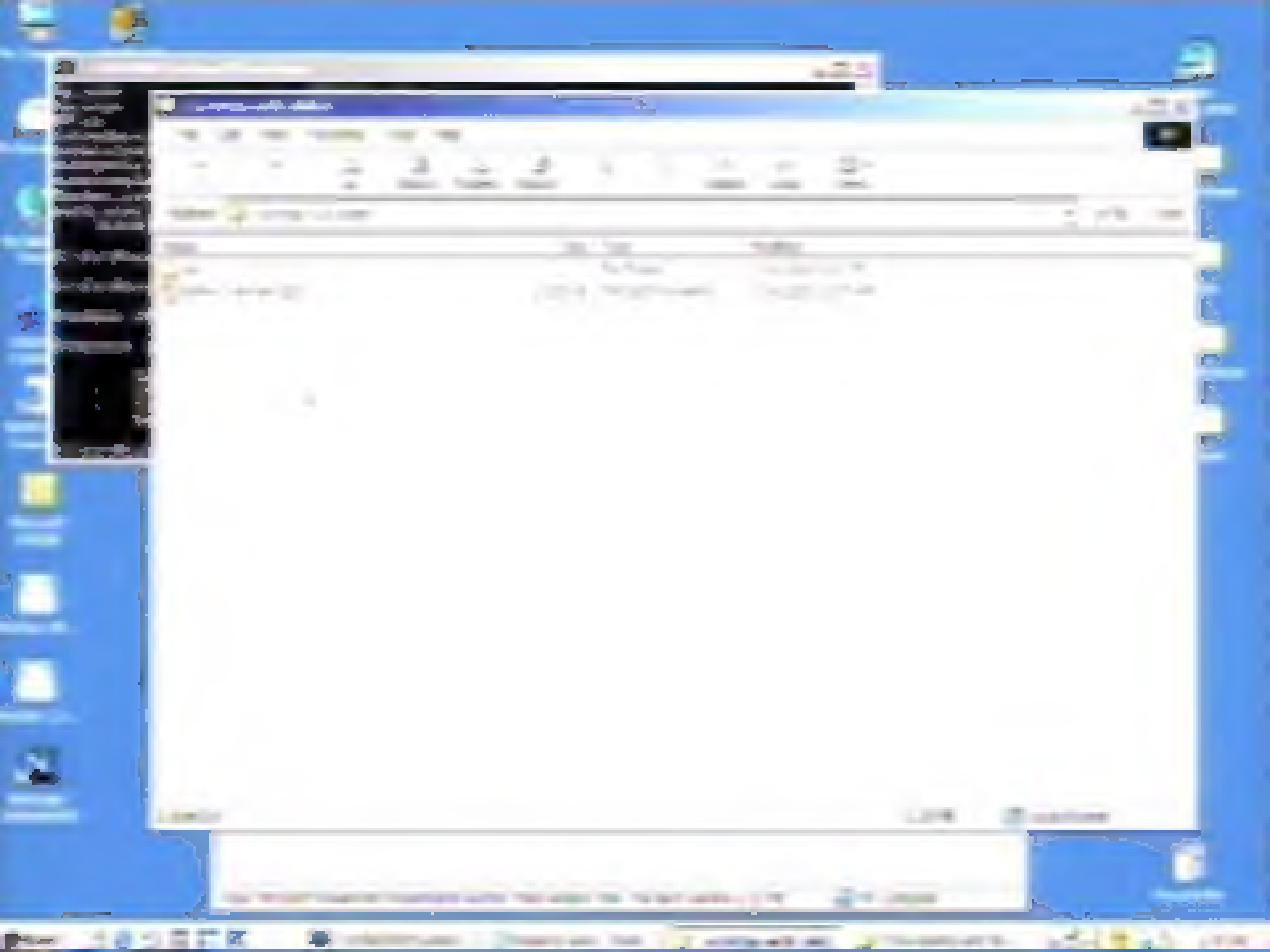
- [illegible]
  - [illegible]
  - [illegible]
- [illegible]

Additional Information

- "A [illegible]
  - [illegible]
- [illegible]
  - [illegible]
- [illegible]





Additional Information

- "A Preview of ASP+" from Wrox Press
  - Available on Amazon and BarnesNoble
- Public Sample Application:
  - www.theurgbyl.com
- ASP+ Community Sites:
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